PTO 07-5140

PULL-OUT GUIDE FITTINGS
[Ausziehfuehrungsgarnitur fuer Schubladen]

JULIUS BLUM GESELLSCHAFT M.B.H

UNITED STATES PATENT AND TRADEMARK OFFICE Washington, D.C June 2007

Translated by: FLS, Inc.

PUBLICATION COUNTRY	(19)	AT
DOCUMENT NUMBER	(11)	004518
DOCUMENT KIND	(12)	U1
PUBLICATION DATE	(43)	20010827
APPLICATION NUMBER	(21)	8014/01
DATE OF FILING	(22)	20000616
ADDITION TO	(61)	
INTERNATIONAL CLASSIFICATION	(51)	A47B 88/10
PRIORITY	(30)	
INVENTORS	(72)	
APPLICANT	(71)	JULIUS BLUM GESELLSCHAFT M.B.H
DESIGNATED CONTRACTING STATES	(81)	
TITLE	(54)	PULL-OUT GUIDE FITTINGS
FOREIGN TITLE	[54A]	AUSZIEHFUEHRUNGSGARNITUR FUER SCHUBLADEN

The invention relates to pull-out guide fittings for drawers /2* or the like with a drawer-side pull-out rail, a carcass-side support rail and a center rail which runs between these two rails on both sides of the drawer, the load between the rails being transmitted by means of rollers which are supported in separate carriages.

In guides with rollers which are supported in their own carriages, the load-transmitting running elements, specifically the roller bodies in the carriages, are located in the middle of the guide system.

Rollers in this connection are roll bodies in general, i.e. disk-shaped rollers, balls and drums.

In pull-out guide fittings with riveted-on rollers, the loadtransmitting elements in the closed state have the greatest possible distance from one another.

Therefore pull-out guide fittings with rollers which are supported in carriages in the closed state are more unstable than comparable pull-out guide fittings with riveted-on rollers. This applies especially to full chests, because they have one rail or one running system more than partial chests.

The instability of the pull-out guide fittings becomes adversely noticeable in the closed state of the drawers in furniture fronts. First of all, because the gaps between fronts on top of one another, depending on the load on the drawer or depending on production tolerances, are of different size. Secondly, because the fronts do not hit the front edge of the carcass parallel, but depending on the load on the drawer or depending on production tolerances, strike the front edge of the carcass to the top or bottom. It has therefore been

 $^{^{\}star}$ Numbers in the margin indicate pagination in the foreign text.

proposed that a so-called stop support be attached to the drawer rail for a full chest; it runs into the carcass-side support rail about 60 mm in front of the closed position of the pull-out guide fittings or the drawer. In spite of a contact bevel as gentle as possible, the stop support running into the support rail is clearly perceptible and is perceived as undesirable.

The object of the invention is to devise vertical positioning of the front or forward end of the drawer which is characterized by more gentle contact.

The object as claimed in the invention is achieved in that in /3 the front region of the support rail a stationary support roller is supported on which the pull-out rail with a running bridge travels and which is supported at least in the closed state of the drawer.

Since the rear edge of the pull-out rail in full chests is generally pulled out as far as the front edge of the carcass and the roller, as claimed in the invention, is located stationary on the carcass rail which in turn is always located behind the front edge of the carcass, in the fully opened state of the drawer there is decoupling of the support function between the stationary roller and the pull-out rail. But as claimed in the invention, pull-out guides of pull-out guide fittings are also encompassed, where the pull-out rail does not travel beyond the support roller or is not decoupled in the opened position of the drawer.

One embodiment of the invention is detailed below using the figures of the attached drawings.

Figure 1 shows an exploded diagram of the pull-out guide fittings as claimed in the invention,

Figure 2 shows a cross section through the pull-out guide fittings as claimed in the invention,

Figure 3 shows a view of the front end of the pull-out guide fittings in the direction of the arrows A-A of Figure 2 with the drawer closed, and

Figure 4 shows the same view as Figure 3 with the drawer pulled completely out.

The pull-out guide fittings as claimed in the invention have a support rail 1 which is attached to the side wall of the furniture, a pull-out rail 4 which is attached to the drawer 10, and a center rail 3 which runs between the two rails 2, 4.

There is a carriage 5 which bears the rollers between the support rail 2 and the center rail 3.

Between the center rail 3 and the pull-out rail are carriages 6, 7 in which there are likewise rollers.

Since the carriages 5, 6, 7 in the closed state of the drawer 10 are located in the center of the guide system, instability of the drawer 10 could not be avoided in the conventional pull-out guide fittings.

As claimed in the invention, in the forward region of the /4 support rail 2 there is a support roller 8 on which the pull-out rail 4 with a running bridge 11 runs. The pull-out rail 4 is made with an inverted U-profile, with a center bridge 4' and two side bridges 4" and the running bridge 11 is angled directly from one side bridge 4" to the interior of the rail profile.

In the illustrated embodiment the pull-out rail 4 is located directly underneath the drawer bottom.

The support roller 8 is supported in a block 12 which is mounted to be able to move on the support rail 2. Thus both the distance of the roller 8 from the front edge 13 of the support rail 2 and also the height of the support roller 8 can be adjusted.

Claims /5

- 1. Pull-out guide fittings for drawers or the like with a drawer-side pull-out rail, carcass-side support rail and a center rail which runs between these two rails on both sides of the drawer, the load between the rails being transmitted by means of rollers which are supported in separate carriages, characterized in that in the front region of the support rail (2) a stationary support roller (8) is supported on which the pull-out rail (4) with a running bridge (11) travels and which is supported at least in the closed state of the drawer (10).
- 2. Pull-out guide fittings as claimed in Claim 1, wherein the stationary support roller (8) is located at the front end (13) of the support rail (2).
- 3. Pull-out guide fittings as claimed in Claim 1 or 2, wherein the pull-out rail (4) has an inverted U-profile with a center bridge (4') and two side bridges (4"), and wherein the running bridge (11) which runs on the stationary support roller (8) is angled from one of the side bridges 4".
- 4. Pull-out guide fittings as claimed in one of Claims 1 to 3, wherein the stationary support roller (8) is vertically adjustable.
- 5. Pull-out guide fittings as claimed in one of Claims 1 to 4, wherein the stationary support roller (8) is located laterally next to the center rail (3).



